

Applicant: Uwe Heitmann
Appl. No. 09/482,679

Remarks

Reconsideration of this Application is respectfully requested.

Claims 1-7 are pending in the application, with claim 1 being the independent claim.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Based on the above Amendment and the following Remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Claims 1-7 are rejected under 35 U.S.C. §102(e) as being anticipated by Orihara.

Reconsideration is respectfully requested.

Claim 1 recites a "guide track having a generatrix based on a uniform curve." The guide track 21 with a uniform curve is shown in Fig. 3 as having continuous transitions at the slotted nozzles between the individual segments 38 of the sliding surface 21a.

Orihara discloses an arrangement with a guide path 38a that has a curved surface, but instead of having a uniform curve, each segment is interrupted at each slotted nozzle by a step. The arrangement of Orihara is more analogous to Fig. 2 of the present application, labeled as prior art. In arrangements such as Orihara, in the area of the step, the tobacco stream meets the air flow coming from the air flow nozzles only at the end of a relatively long, unguided trajectory. In order to accelerate the tobacco stream to the required velocity, the velocity of the air flow must therefore be increased, thereby negatively affecting the overall power economy of the system.

Accordingly, because it fails to teach this feature, Orihara does not anticipate claim 1.

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Claims 3 and 6, ultimately dependent on claim 1, are patentable for the reasons discussed above. Claim 3 and 6 also recite additional features which further distinguish the invention.

Claim 3 recites that "the air jet has a downstream wall, in relation to the conveyance direction of the fiber stream, which makes a transition into the concave sliding surface of the guide track in a steady convex curvature." In Fig. 3 of the present invention, the downstream wall is represented by reference numeral 38a.

The downstream wall shown in Orihara appears to be angled, but does not transition into the sliding surface with a steady convex curvature. This could lead to interruption in the flow of the tobacco. The arrangement recited by claim 3 ensures that the flow of tobacco remains defined and controlled.

As discussed in the present specification, a close-lying wall flow (utilizing the Coanda effect) is achieved in that the downstream wall of the air jet, in relation to the conveying direction of the fiber stream, makes a transition as a continuous convex curve into the concave sliding surface of the guide track. This arrangement enables operation of the air supply at a low air pressure which improves the effectiveness and the energy economy of the system.

Claim 6 recites that the track comprises a plurality of individual guide track segments having border surfaces that form nozzle walls of the air jets. As clearly shown in Fig. 3 of Orihara, the track is formed from one piece.

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All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance with claims 1-7.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

Date: 10/05/01



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Version With Markings To Show Changes Made

In the Claims:

1. (Amended) A device for creating a spread-out stream of tobacco fibers, comprising:
a concave-curved guide track along which the fiber stream of tobacco fibers are
conveyed, the guide track having a generatrix based on a uniform [generating] curve; and
at least one air jet having an air flow opening interrupting the guide track so that air
exiting the air flow jet acts in a conveyance direction of the fiber stream for spreading out the
tobacco fibers.

In the Specification:

Page 8, replace the paragraph beginning on line 13 with the following rewritten paragraph:

Figure 2 illustrates a conventional guide track 21 wherein sliding surface 21a consists of sliding plates, or respectively sliding bodies 37, set off in steps in the conveying direction (arrow 36) of the tobacco stream. As can be seen, air flow nozzles 23 terminate on the respective steps in guide track 21. This known [know] construction has the result that in the area of a step, between two sliding plates, the tobacco stream meets the air flow coming from the air flow nozzles only at the end of a relatively long free trajectory, where the air flow has already lost approximately two-thirds of its exit velocity. In order to accelerate the tobacco stream to a predetermined value, the flow speed of the air flow must therefore be increased by an increase in the blower output, which negatively affects the overall power economy of the system.